### RCRA Inspection Report

## 1) Inspector

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Hazardous Waste Enforcement and Compliance Section
U.S. Environmental Protection Agency (EPA), Region 4
61 Forsyth Street, S.W.
Atlanta, Georgia 30303
Phone: 404-562-8616

## 2) <u>Facility Information</u>

Pinewood Site Custodial Trust 8430 Camp Mac Boykin Road Pinewood, South Carolina 29125-9733

EPA ID Number: SCD 070 375 985

NAICS Code: 562211

# 3) Responsible Official

Robert A. Kerr, Jr President of Pinewood Interim Administrator, Inc. Moore & Van Allen PLLC 78 Wentworth Street, Charleston, South Carolina 29401

# 4) Inspection Participants

Brian Burgess, Pinewood Site Custodial Trust, Site Manager Cindy Devlin, South Carolina Department of Health and Environmental Control (SCDHEC) Gerald Shealy, SCDHEC Jeffrey Schrag, SCDHEC Keith Lane, SCDHEC Earle Watson, SCDHEC Javier García, USEPA

#### 5) Date of Inspection

February 22, 2016

## 6) Applicable Regulations

South Carolina Hazardous Waste Management Act (SCHWMA), S.C. Code Ann. § 44-56-60, as amended, [Section 3005 of the Resource Conservation Recovery Act (RCRA), 42 U.S.C. § 6925] [Subtitle C of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 3005, the South Carolina Hazardous Waste Management Regulations (SCHWMR) S.C. Code Ann. Regs 61-79.260-270 and 61-79.273. [40 C.F.R. Parts 260-270, 273]

EPA RCRA Site Inspection Report Pinewood Site Custodial Trust Pinewood, South Carolina 29125-9733 EPA ID Number SCD 070 375 985

## 7) Purpose of Inspection

The purpose of this inspection was to conduct an unannounced compliance evaluation inspection (CEI) to determine Pinewood Site Custodial Trust's compliance with the applicable requirements of RCRA, and the corresponding SCHWMR regulations.

# 8) Previous Inspection History

On June 22, 2015, the SCDHEC conducted a RCRA inspection at Pinewood Site Custodial Trust (Pinewood or "facility"). In the inspection report, the SCDHEC expressed concern about the number of hazardous waste roll-off containers stored on site and the high number of 30-day storage extensions that the facility has requested.

### 9) Facility Description

Pinewood is a closed commercial hazardous waste treatment, storage and disposal facility. The facility is located on Camp Mac Boykin Road (SC County Road 51) in a rural area of Sumter County between Summerton and Pinewood. Pinewood received hazardous and nonhazardous waste until 2000, when site closure began. Pinewood closed in 2003 following a bankruptcy settlement. All landfill cells are closed and capped. The site is expected to remain in post-closure care for at least 100 years and it is subject to a RCRA post-closure care permit issued by SCDHEC.

Kestrel Horizons, LLC (Kestrel) acted as Trustee from 2003 to 2015. In November of 2015, in accordance with the provisions of the Pinewood Site Custodial Trust Agreement, SCDHEC appointed Pinewood Interim Administrator, Inc. (PIA) as the interim administrator of the Pinewood Site Custodial Trust (PSCT). Sumter Transport Company is in charge of the site's operations including maintenance and waste handling activities.

Post closure care activities at the site include management of the landfill leachate and its treatment residue, maintenance of the landfill cap, surface water management, and implementation of a groundwater-monitoring program. The landfill has a double leachate collection system. The leachate from the primary collection system is accumulated in sumps and transferred to the Central Tank Farm (CTF) via underground pipes. The landfill's primary leachate collection system has 45 sumps. Picture 1 shows the header of a primary sump. The leachate from the secondary collection system is also accumulated in sumps; however, it is transferred to the CTF by truck. The landfill has 23 secondary leachate accumulation sumps. Picture 2 shows the typical connection point of a secondary leachate sump. The leachate is a listed hazardous waste, F039 and has been found to exhibit the hazardous waste characteristics of toxicity for arsenic (D004), 1,2-Dichloroethane (D028), Tetrachloroethylene (D039) and Trichloroethylene (D040).

The CTF consists of a building containing ten 40,000-gallon aboveground steel tanks and a leachate offloading station. The tank farm has concrete secondary containment and a metal roof. The tanks in the CTF are used for temporary storage of the leachate prior to treatment in the onsite Leachate Treatment System (LTS). The LTS is in a building adjacent to the CTF. The LTS building has a 6-inch concrete curb, a lined trench drain system and a sump to collect any releases. The sump has a level float switch that would trigger an alarm that is connected to a central control

system. The liquid collected in the sump would be pumped with vacuum truck or other means and transferred to the CTF.

The LTS is comprised of tanks T-200, T-210, T-300, T-400, T-500, T-600, T-700, and T-900, a filter press (FLT-600), two dryers (D-601 and D-901), an evaporator (E-800), and associated pump system. All units are vented through a single stack in the building. According to the construction air permit application, the evaporator has no air emission control devices.

The LTS is a batch operation and includes flocculation, dewatering, evaporation, and drying. (See Attachment 1 – Simplified Process Flow Diagram). The first unit in the LTS is tank T-200, which serves as the holding/mixing tank. The maximum batch size treated in tank T-200 is 6,400 gallons. In tank T-200, the leachate is mixed with either sulfuric acid and/or caustic soda solution and mixed with perlite. The perlite is reported to facilitate removal of the precipitate in a downstream filter press. After mixing is complete, the entire content of the mixing tank is pumped to tank T-210. Pinewood refers to the output of tank T-200 as a "sludge." In tank T-210, the sludge is mixed with a conditioner. From tank T-210, the conditioned sludge is fed to the filter press, designated as unit FLT-600.

In unit FLT-600, the conditioned sludge is pressed to remove liquids from the sludge. The FLT-600's liquid phase (filtrate) is pumped to tank T-700, while the pressed sludge is fed to the sludge drier. The sludge dryer, referred to as unit D-601, is an electrically heated dryer. The dried sludge is accumulated in a roll-off container stationed adjacent to the drier. Once the roll-off is full, it is transferred to the 90-day storage area located in the Waste Pile Building #2, before it is shipped off-site as a D012/F039 hazardous waste.

Tank T-700 is used as the feeding tank for the evaporator. The evaporator, designated as unit E-800, is a propane fired device, operates at a temperature range between 212°F and 250°F. The residue from the evaporator, referred to as slurry, is pumped to tank T-900, which is followed by the slurry dryer (referred to as unit D-901). The dried slurry is accumulated in a roll-container stationed adjacent to the slurry drier. Upon becoming full, the slurry accumulation container is transferred to the 90-day storage area in the Waste Pile Building #2, before it is shipped off-site as an F039 listed hazardous waste.

#### 10) Findings

Upon arriving at the facility, the inspectors met with Brian Burgess, presented their credentials and explained the purpose of the inspection. Mr. Burgess provided a brief description of the facility's operation. Following the facility description, the team toured the facility. The following is a description of the observations made during the facility tour:

#### Central Tank Farm:

On the offloading pad, the inspectors observed one 3,000-gallon capacity vacuum truck and one 500-gallon capacity polyethylene container. The vacuum truck was reported to contain leachate pumped from the landfill's secondary collection system. The truck was labeled as containing hazardous waste and dated with the accumulation start date of 1/29/16 (pictures 3-4). The accumulation start date represents the date on which the leachate was pumped from the sump. According to Pinewood officials, the polyethylene container contained liquids pumped from the

CTF secondary containment system. The container was labeled as containing hazardous waste and dated with the accumulation start date of 1/29/16 (pictures 5-6). In addition, the inspectors observed one 55-gallon container used for the accumulation of leachate-contaminated personal protective equipment (PPE) and debris generated on the pad. The container was properly labeled, closed and appeared to be in good condition (picture 7).

During the inspection, Mr. Burgess indicated that tanks #7, #8 and #9 were the only tanks that contained hazardous wastes. The remaining seven tanks were reported to be empty. The tanks in use were labeled as containing hazardous wastes and dated (pictures 8-13). The accumulation start dates observed on the tanks were as follows:

Tank #	Accumulation Start Date
7	2/8/2016
8	2/4/2016
9	2/17/2016

All tank openings and manholes appeared to be properly closed (pictures 14 - 16). The floor of the tank farm secondary containment system had small spots with cracks in the concrete and the sealant (pictures 17 - 21).

Pursuant to S.C. Code Ann. Regs. 61-79.262.34(a)(1)(ii) [40 C.F.R. § 262.34(a)(1)(ii)], which incorporates S.C. Code Ann. Regs. 61-79.265.193(e)(1)(iii) [40 C.F.R. § 265.193(e)(1)(iii)], a generator that stores hazardous waste in tanks shall maintain the secondary containment systems of its hazardous waste storage tanks free of cracks or gaps.

## Leachate Treatment System (LTS) Building:

At the time of the inspection, all LTS units were properly identified and appeared to be in good condition (pictures 22 and 23). According to the facility's air permit application, all LTS units are vented directly to atmosphere via a common stack in the LTS building. Although the LTS has an air permit, the EPA recommends that the LTS be included in the Post Closure Care Permit as a Miscellaneous Unit (Subpart X) under of S.C. Code Ann. Regs. 61-79.264 [Subpart X of 40 C.F.R. Part 264 (40 C.F.R. Part 264)], and subject to Subpart CC of S.C. Code Ann. Regs. 61-79.265 [Subpart CC of 40 C.F.R. Part 265] or that it meets any of the exemptions in S.C. Code Ann. Regs. 61-79.265.1080(b) [40 C.F.R. § 265.1080(b)]. After the inspection, EPA personnel were informed that the RCRA post closure permit would be amended to include the LTS and the LTS sludge storage area.

Connected to the slurry dryer, the inspectors observed a 30-gallon container identified as containing condensate from the dryer (pictures 24 and 25). The container was properly labeled, closed and appeared to be in good condition. The liquid accumulated in this container is pumped to tank T-200 via a pump (P003) in the lab area.

Also located in the in the LTS building, the inspectors observed two roll-off containers used for the accumulation of pressed sludge and dried slurry (picture 26). Both containers were closed, labeled, dated and appeared to be in good condition. The containers were marked with accumulation start dates of 2/20/16 and 2/6/16. Adjacent to the west side door of the building the

inspectors observed a 55-gallon container used for the accumulation of PPE generated in the LTS (picture 27). The container was properly labeled, closed and appeared to be in good condition.

#### Auxiliary Tank Farm:

The auxiliary tank farm consists of two 40,000-gallon capacity aboveground tanks. Mr. Burgess indicated that the tanks were empty and that no hazardous waste has been placed in the tanks for the last 18 months. When in service, they would be used for the collection of leachate from the landfill's secondary leachate collection system. No hazardous waste was observed in the area during the inspection.

#### Waste Pile Building #2:

The name of the building reflects the management of hazardous waste in piles at the building when the landfill was in operation. Currently, Pinewood uses this building for storage of hazardous waste containers prior to shipment off-site. The unit is not covered by the facility's post-closure care permit; hence, storage is limited to 90-days. In the building, the inspectors observed two satellite accumulation area containers. One container was used for the accumulation of contaminated PPE and the other container was used for non-burnable contaminated debris (pictures 28 and 29). Both containers were properly labeled, closed and appeared to be in good condition. Near the accumulation containers, the inspectors observed a roll-off container reported to contain filter press sludge. The container was properly closed, labeled, dated and appeared to be in good condition (pictures 30 – 32). The accumulation start date marked on the container was 9/12/15. Mr. Burgess indicated that SCDHEC had granted two 30-day extensions for the storage of this container for longer than 90-days. The next day following the inspection, Mr. Burgess emailed the EPA a copy of the manifest documenting the shipment of this roll-off container.

Across from the roll-off container, along the building wall, the inspectors observed ten 55-gallon containers (pictures 33 and 34). The containers were reported to contain hazardous waste contaminated debris (burnable and non-burnable). The containers were properly labeled, dated, closed and appeared to be in good condition. The oldest accumulation start date observed on the containers was 12/15/2015.

#### Records Review:

The inspection team reviewed the inspection logs, manifests and training records for January 2015 through February 2016. The training records and manifest appeared to be in good order. No inspection records were found for 8/25/2015. Most of the inspection logs were missing the time of the inspection.

Pursuant to S.C. Code Ann. Regs. 61-79.262.34(a)(1)(ii) [40 C.F.R. § 262.34(a)(1)(ii)], which incorporates S.C. Code Ann. Regs. 61-79.265.195(b) [40 C.F.R. § 265.193(b)], a generator that stores hazardous waste in tanks shall inspect, at least once each operating day, the overfill/spill control equipment, all above ground portions of the tank system, and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system.

Pursuant to S.C. Code Ann. Regs. 61-79.262.34(a)(4) [40 C.F.R. § 262.34(a)(4)], which incorporates S.C. Code Ann. Regs. 61-265.15(d) [40 C.F.R. § 265.15(d)], a generator that stores hazardous waste in tanks shall include in its inspection log, among other requirements, the date and time of the inspection.

When asked about how Pinewood verifies that it treats the leachate within 90-days from its generation, Mr. Burgess indicated that the facility uses a flow through volume analysis. He stated that the leachate generation rate is calculated by measuring the pump strokes of the primary leachate collection system and that the LTS has its own flow meter. The EPA is concerned with how these two calculations are combined to clearly demonstrate that the leachate is being treated within 90-days from the day it is pumped out of the leachate collection sumps. The EPA would expect that leachate accumulation time be calculated from the time it is pumped from the sumps through completion of treatment in the LTS. The EPA is concerned about Pinewood's capacity to treat such leachate within 90-days during periods of heavy rain.

11) Signed

Javier E. García

Senior Enforcement and Compliance Specialist

8/30/16

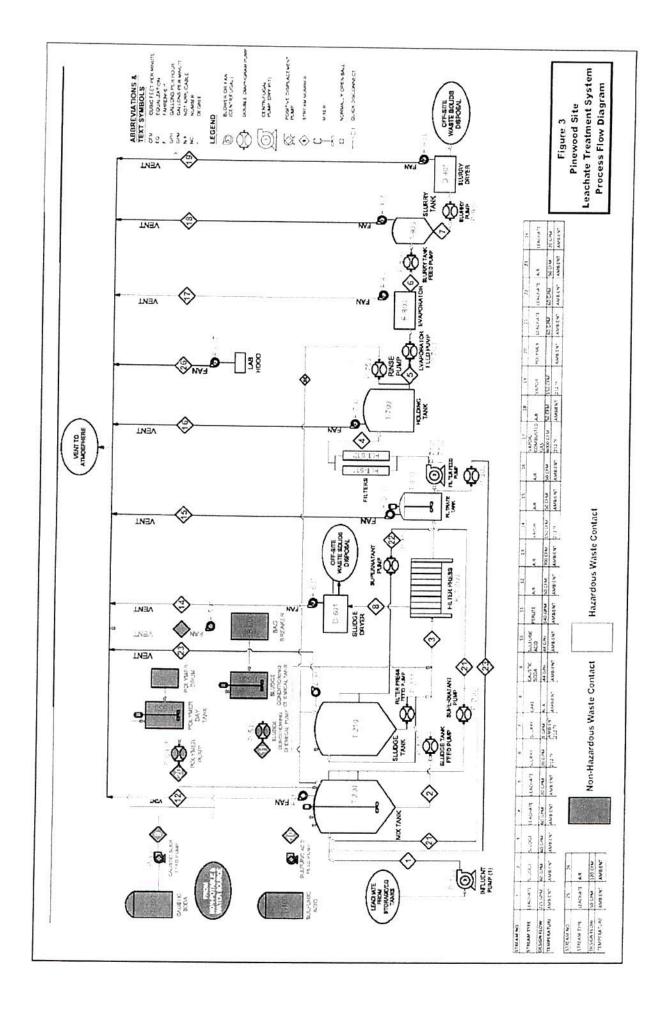
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Concurrence

Larry Lamberth

Chief, Enforcement and Compliance Branch Resource Conservation and Restoration Division 08/31//6

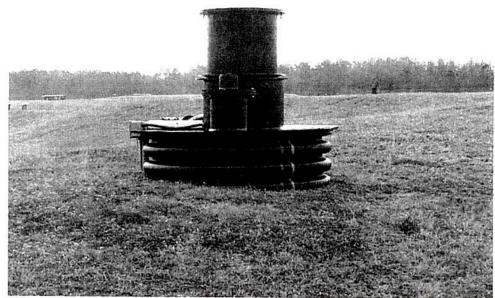
# EPA RCRA Site Inspection Report Attachment 1 Leachate Treatment System Process Flow Diagram Pinewood Site Custodial Trust Pinewood, South Carolina EPA ID Number SCD 070 375 985



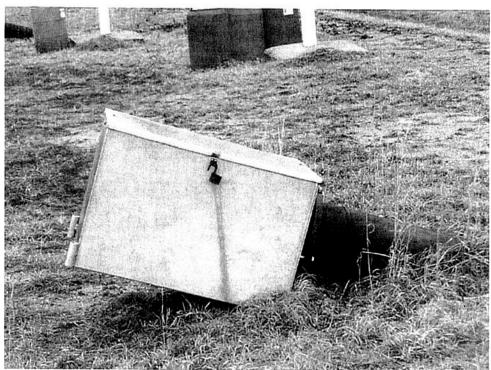
# Pinewood Custodian Site Pinewood, SC

EPA CEI Pictures - February 22, 2016

CEI Report - Attachment 2



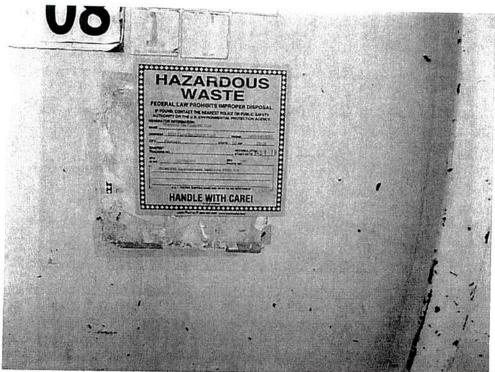
Picture 1: Primary leachate collection sump identified as 1-C-1. Picture shows typical sump configuration. Picture taken by Keith Lane, SCDHEC, on behalf of EPA, on 2/22/16 at 1:49 pm



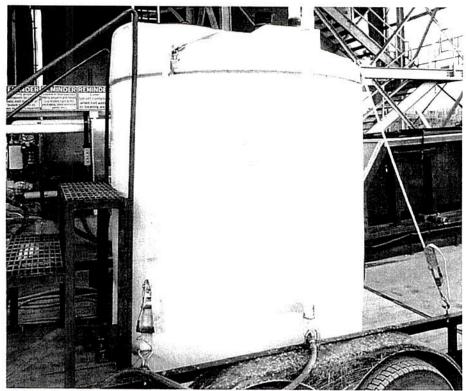
Picture 2: Vacuum truck connection point to secondary leachate collection sump. Picture shows typical sump configuration. Picture taken by Keith Lane, SCDHEC, on behalf of EPA, on 2/22/16, at 1:58 pm.



Picture 3: Side view of the vacuum truck parked on the concrete pad adjacent to the Central Tank Farm (CTF). The truck contained leachate from the secondary leachate collection system, which is pumped to one of the tanks in the CTF. Picture taken by Javier García on 2/22/2016, at 2:05 pm.



Picture 4: Close view of the hazardous waste label on the vacuum truck parked on the CFT's off-loading dock. Picture taken by Javier Garcia on 2/22/2016, at 2:05 pm.



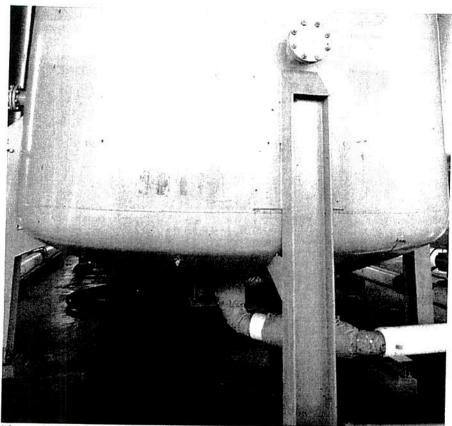
Picture 5: Polyethylene container parked on the concrete pad adjacent to the CTF. The container is used to collect liquids accumulated in the CTF's secondary containment system. Picture taken by Javier García on 2/22/2016, at 2:07 pm.

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Picture 6: Close view of the hazardous waste label on the container shown in the previous picture (Picture 5). Picture taken by Javier Garcia on 2/22/2016, at 2:07 pm.



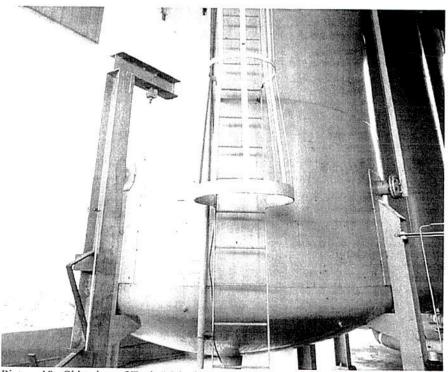
Picture 7: Satellite accumulation area container (SAA) on the concrete pad adjacent to the CTF. The container is used for the accumulation of hazardous waste (F039) contaminated personal protection equipment. Picture taken by Javier García on 2/22/2016, at 2:08 pm.



Picture 8: Side view of Tank # 7 at the CTF. Picture taken by Javier García on 2/22/2016, at 2:12 pm.

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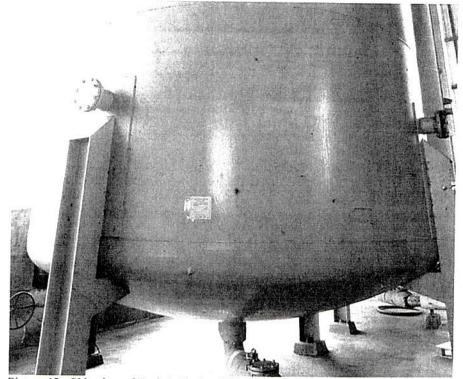
Picture 9: Close-up of the hazardous waste label on Tank #7 in the CTF. Picture taken by Javier García on 2/22/2016, at 2:13 pm.



Picture 10: Side view of Tank # 8 in the CTF. Picture taken by Javier García on 2/22/2016, at 2:14 pm.

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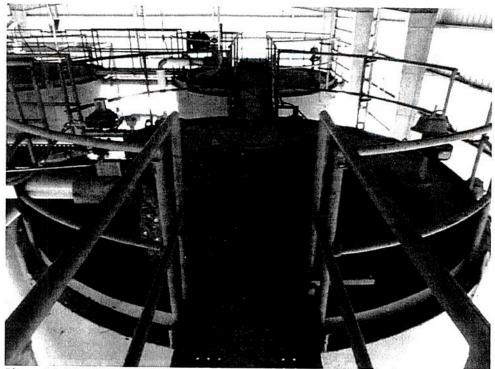
Picture 11: Close-up of hazardous waste label on Tank # 8 at the CTF. Picture taken by Javier García on 2/22/2016, at 2:14 pm.



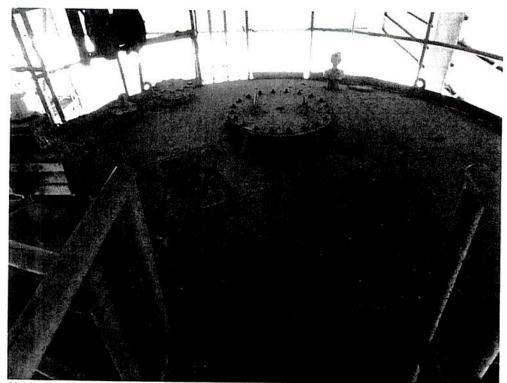
Picture 12: Side view of Tank # 9 in the CTF. Picture taken by Javier García on 2/22/2016, at 2:15 pm.

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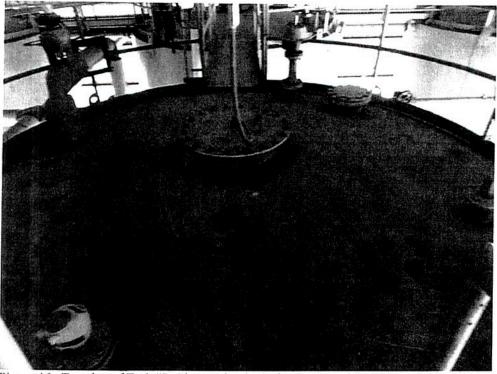
Picture 13: Close up of hazardous waste label on Tank # 9 in the CTF. Picture taken by Javier Garcia on 2/22/2016, at 2:15 pm.



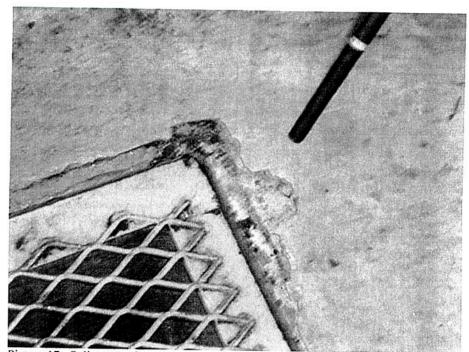
Picture 14: Top view of Tank #9. Picture taken by Javier García on 2/22/2016, at 2:18 pm.



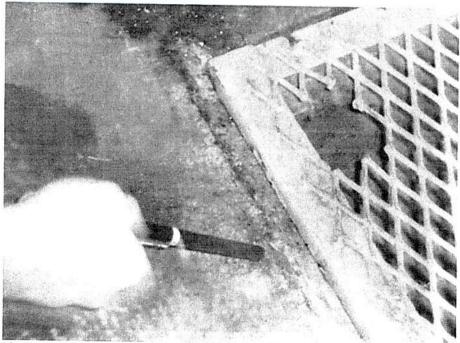
Picture 15: Top view of Tank #8. Picture taken by Javier García on 2/22/2016, at 2:18 pm.



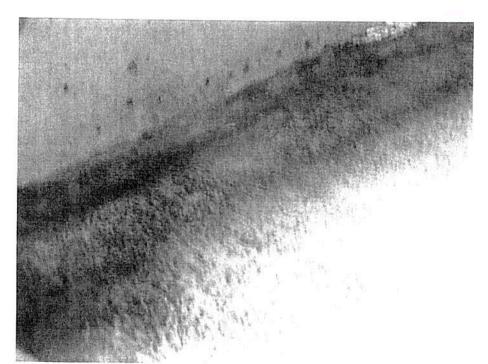
Picture 16: Top view of Tank #7. Picture taken by Javier García on 2/22/2016, at 2:19 pm.



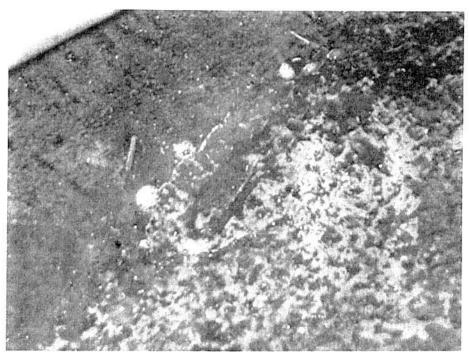
Picture 17: Split seam of secondary containment pad located in the northeast corner of the Central Tank Farm. Picture taken by SCDHEC on 2/22/16.



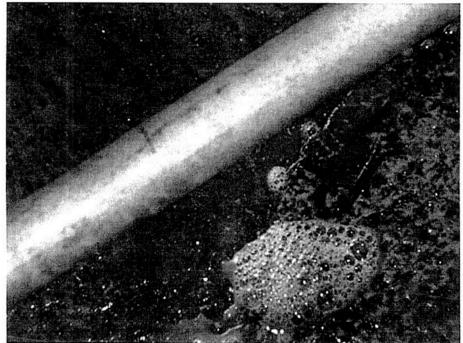
Picture 18: Split seam of secondary containment pad located in the southeast corner of Central Tank Farm. Picture taken by SCDHEC on 2/22/16.



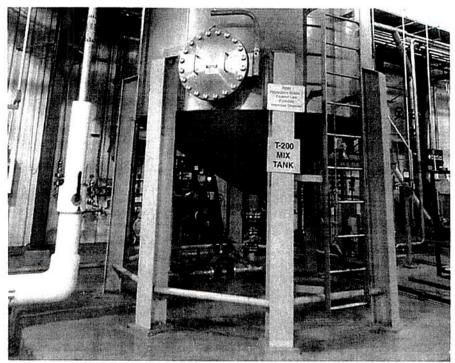
Picture 19: Bubbling of the sealant on the secondary containment pad along the north side of the Central Tank Farm. Picture taken by SCDHEC on 2/22/16.



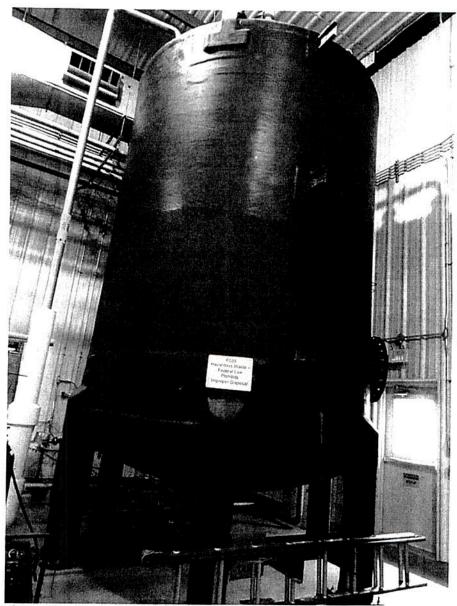
Picture 20: 6-inch crack near the center of Central Tank Farm's secondary containment pad. Picture taken by SCDHEC on 2/22/16.



Picture 21: Closer view of the secondary containment pad crack shown in picture 11. Picture taken by SCDHEC on 2/22/16.



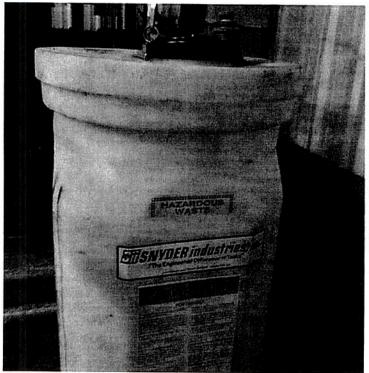
Picture 22: Side view of Tank #200 of the Leachate Treatment System (LTS). In the tank, the leachate is treated by adjusting the pH and mixing it with a flocculant. Picture taken by Javier Garcia on 2/22/2016, at 2:27 pm.



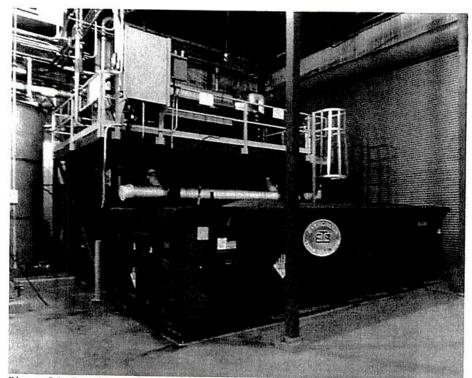
Picture 23: Side view of Tank # 210 of the LTS. The tanks receives the flocculated leachate from tank 200 and it is used as the feed tank to the filter press. The tank is marked as containing hazardous wastes. Picture taken by Javier García on 2/22/2016, at 2:28 pm.



Picture 24: SAA container for slurry dryer condensate. The condensate is transferred to Tank #200 via pump P-300 located in the laboratory. Picture taken by Javier García on 2/22/2016, at 2:37 pm.



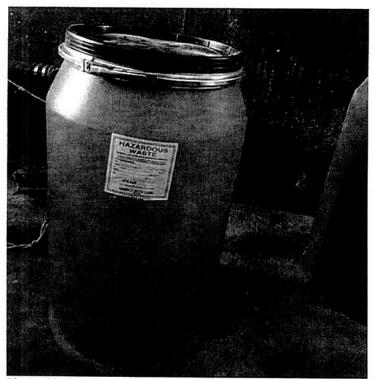
Picture 25: View of SAA container for slurry dryer condensate. The condensate is transferred to Tank 200. Picture taken by Javier García on 2/22/2016, at 2:38 pm.



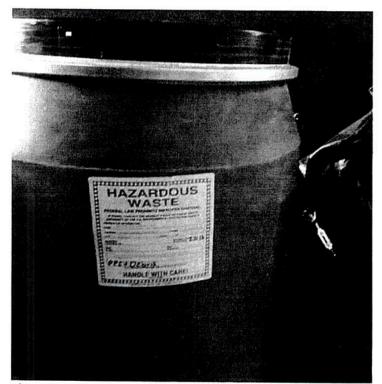
Picture 26: Dry slurry roll off container, adjacent to sludge filter press. The container was labeled and dated with an accumulation start date of 2/20/16. Picture taken by Javier García on 2/22/2016, at 2:42 pm.



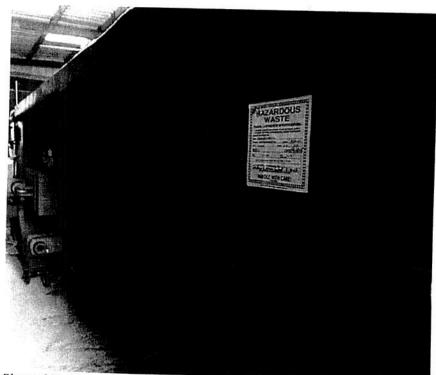
Picture 27: SAA container for contaminated PPE generated in the LTS building. Picture taken by Javier García on 2/22/2016, at 2:45 pm.



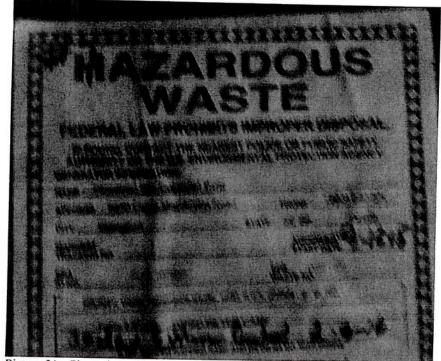
Picture 28: Non-burnable contaminated debris SAA container in the Waste Pile Building. Picture taken by Javier García on 2/22/2016, at 3:17 pm.



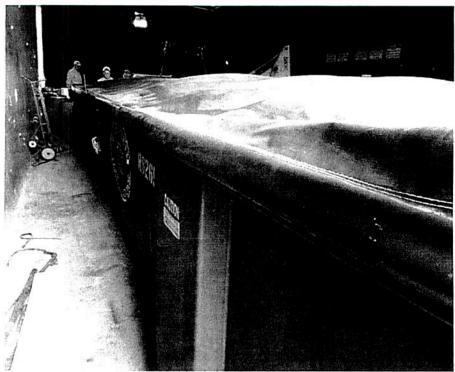
Picture 29: Burnable contaminated PPE SAA container in the Waste Pile Building. Picture taken by Javier García on 2/22/2016, at 3:17 pm.



Picture 30: Filter press sludge storage roll-off container in the Waste Pile Building. The accumulation start date marked on the container was 9/12/15. Picture taken by Javier García on 2/22/2016, at 3:19 pm.



Picture 31: Close view of label on filter press sludge storage roll-off container in the Waste Pile Building showing the accumulation start date (9-12-15) on the container. Picture taken by Javier García on 2/22/2016, at 3:17 pm.



Picture 32: General view of the filter press sludge roll-off container in the Waste Pile Building. The container was marked with the accumulation start date of 9/12/15. Picture taken by Javier García on 2/22/2016, at 3:19 pm.



Picture 33: Waste Pile Building less than 90 days 55-gallon storage area. The oldest container was marked with the accumulation start date of 12/21/15. Picture taken by Javier García on 2/22/2016, at 3:23 pm.



Picture 34: Waste Pile Building less than 90 days 55-gallon storage area. The oldest accumulation start date observed on the 55-gallon containers 12/21/15. Picture taken by Javier Garcia on 2/22/2016, at 3:23 pm.